

degrees; 105 degrees; down to 101 degrees, then 105 degrees at the time of death.

Spinal punctures: On entry, fluid clear; pressure, 110 millimeters of water; found 3 cells; 1 lymphocyte; sugar, 72 milligrams.

Third day: One cell; lymphocyte.

Blood: Wassermann was negative.

Red blood count, 3,490,000; 65 per cent hemoglobin.

White blood count, 14,350; polymorphonuclears, 79.

On entry: Hemoglobin, 72 per cent; white blood count, 12,750; urine was negative.

Blood was positive for St. Louis type of encephalitis, and negative for equine encephalitis.

#### COMMENT

From the foregoing, it would seem that the diagnosis of encephalitis equinus can be only a provisional diagnosis. While the diagnosis may be suspected because of the unusual sequence of events or the picture of a central nervous disease that does not quite fit poliomyelitis or epidemic encephalitis, positive diagnosis rests on available blood reactions.

Bladder paralysis and pain (not stiffness) in the neck were the most constant findings. Frontal headache was also present in most. Suggestive Kernig's were found in most cases.

In review of the cases, the mode of onset varies in every case, *i. e.*, it may be sudden or gradual.

The temperature curve was not the same or at all similar in any two cases, but all had temperature elevations. The white counts varied from 9,000 to 16,000, and the polymorphonuclear percentages varied from 69 to 91.

The spinal fluid cell counts in all cases diagnosed, horse encephalitis varied from 3 cells to 247 cells, but in no one case was the highest cell count less than 21 cells.

The one case of St. Louis type encephalitis showed three cells on first spinal, and one cell on subsequent spinal.

The differential spinal fluid cell count was always 95 per cent, or over, lymphocytes, including the encephalitis lethargica.

Spinal fluid sugar in all cases was normal.

Blood serums as reported by the Hooper Foundation were either positive for encephalomyelitis equinus or St. Louis type, never for both. In one case the report was negative for both types. This case occurred while two other cases of horse encephalitis were in the hospital; the picture was very similar and diagnosis was made in spite of negative blood finding at the Hooper Foundation.

#### SUMMARY

Encephalomyelitis equinus is not an uncommon disease, especially in the San Joaquin Valley. The disease may easily be mistaken for anterior poliomyelitis or encephalitis lethargica. In the cases presented, physical finding of bladder paralysis, soreness of the neck, frontal headaches, and suggestive Kernig's were most constant. Spinal fluid cell count varies widely, but lymphocytes are always predominant, while spinal-fluid sugars are always normal.

All areas of Merced County, from which these cases came, were heavily infested with mosquitoes, while about 50 per cent of the patients had no contact whatever with horses.

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## A NEW TYPE OF BELT FOR SPLINTING THE CHEST\*

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RECENTLY I designed a new type of belt for use in unilateral pleurisy or rib fracture, consisting of strong elastic for the sound side of the chest, and material for the side involved. One shoulder strap prevents the belt from sliding down. On to each end of one-half are sewed three long canvas straps, and on to each strap is threaded a strong eye which can be looped over hooks sewed onto the ends of the opposite half. By pulling on the straps the belt can be tightened both in front and behind.

One might think that a belt containing elastic in any part of it would allow both chests to expand equally, but this is not the case. I tested the belt first on a patient with fracture of the right seventh rib. With the belt in place the breath sounds on the right side above and underneath the belt were greatly diminished, but were normal on the left; whereas, when the belt was off the breath sounds were plain on the right, proving that the diminution of breath sounds in the first instance was not due to natural splinting following a fracture. Also, we viewed the chest under the fluoroscope with the belt in place, and the movement on the right was greatly restricted. The explanation for this fact is that friction between the skin and the belt prevents the belt from sliding, and therefore only the elastic side allows chest movement.

I have used the belt both in pleurisy and rib fracture, with relief of pain in both. The advantages over adhesive need no comment.

Other belts for splinting the chest are on the market, but they contain a strip of elastic on each side, allowing equal, though restricted movement of the two sides. An elastic bandage wrapped

\* From the Department of Medicine, University of California.

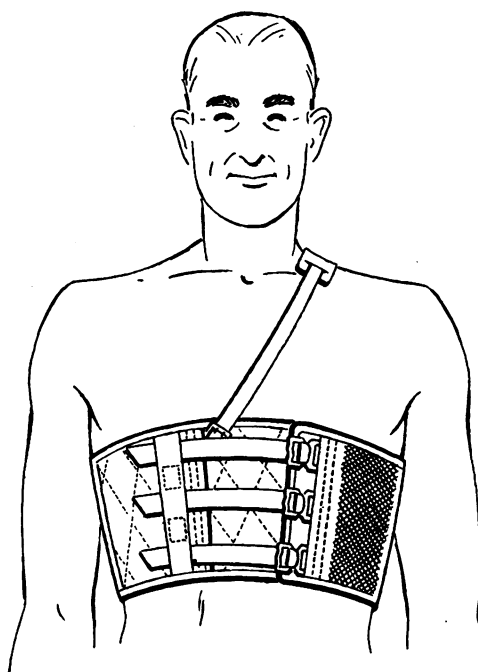


Fig. 1.—Elastic belt for splinting chest.

around the chest accomplishes the same purpose as these belts, although it will not stay in place as well.

When using the belt on a woman, it is placed as high up under the breasts as possible, but not overlying the breasts. I used one recently on a very obese woman having large pendulous breasts, with complete relief of pain. The application of adhesive on such a chest is virtually impossible.

It has been suggested to me that one might use this belt also to secure desired expansion of one chest, as, for instance, following empyema, etc., by making the belt with the elastic only on the involved side, thus encouraging expansion of this side, while restricting movement on the side that is good.

The first belt was kindly made for me and furnished by the David Fox Surgical Appliances. The illustration is theirs. The belt is usually about eight inches in width. Two measurements are necessary; the circumference at the level desired for the upper border of the belt, and the circumference eight inches below this level. The retail price of this belt should not exceed \$10. A sample belt, if measurements are given, can be obtained from the David Fox Surgical Appliance Co., 319 Mason Street, San Francisco, for the price quoted. The belt in place is illustrated in Figure 1.

384 Post Street.

### HIPPOCRATES' APHORISMS\*

By M. SCHOLTZ, M. D.  
*Arcadia*

#### SECTION THREE

1. Changes and variations of the seasons  
Are common factors leading to disease;  
Transitions from a hot to chilly weather  
Prepare the soil for illness with great ease.
2. Some people's nature craves more summer  
heat,  
While others winter snow and cold entreat.
3. Diseases and the ages are related  
To seasons, types of food and to locations;  
This fact determines whether these two factors  
Are suited well or ill in combinations.
4. When daily weather changes  
From hot spells to cold,  
Some morbid visitations  
May be foretold.
5. South winds induce hard hearing and dim  
vision,  
Dull head and languor; while the north winds  
cause  
Hard bowels, sore-throat, dysuria with chills,  
Coughs, pains in chest and breast and kindred  
woes.
6. When summer is like spring, replete with  
humid air,  
The fevered sick excessive sweating bear.
7. The droughty summers,  
With dry, torrid breezes  
Are likely to bring on  
Acute and fell diseases.
8. When seasons follow the pattern set by nature,  
And weather runs true to a season's norm,  
Diseases also run according to their patterns,  
And crises come within time-limits of the  
norm.
9. In fall, diseases are  
More fatal and acute;  
In spring, they're more benign  
And easier to uproot.
10. Fall is a bad season for the sick with phthisis.
11. If winter's dry, with northern winds pre-  
vailing,  
And spring, swayed by the southern winds,  
is wet;  
Then summer brings on sore eyes, dysenteries,  
And agues, in humid people mostly met.
12. If winter's rainy, calm, with southern winds,  
And spring is dry, and winds blow from the  
north,  
Then pregnant women from the slightest  
cause abort,  
Or withered feeble infants are brought forth.  
Withal crop up sore eyes and dysenteries,  
And the old men fall prey to nose catarrhs.
13. If summer's dry with northern winds pre-  
vailing,  
And southern winds supply much rain in fall,  
Then winter sows headaches, coughs, corizae  
And, in some cases, even phthisis may befall.
14. If fall is dry and winds blow from the north,  
With humid men and women this agrees,  
But others may fall prey to sore eyes, fevers,  
To colds and, in some cases, melancholies.
15. Dry seasons, as a rule,  
Are healthier than the wet,  
Which are more likely to  
Mortalities beget.
16. Rainy seasons bring on chronic fevers,  
Loose bowels, quinsies, fits, strokes and  
gangrene;  
In dry seasons dysenteries, phthisis,  
Dysurias, joint and eye troubles are seen.
17. North winds improve the hearing, brace the  
body,  
But pinch the eyes and aggravate chest pain;  
The south winds relax and slow the body,  
Dull sight and hearing, and oft load the brain.
18. In spring and early summer the young bloom;  
The old folks do the best in summer and early  
fall;  
While for the people of intermediate ages,  
Late fall and winter is the best of all.
19. While all diseases may occur  
In any season of the year,  
There're some of them that strongly tend  
In certain seasons to appear.
20. Diseases of the spring are: colds and coughs,  
Bleedings, quinsy, fits and spells of sadness;  
Joint-troubles, leprosy and skin eruptions  
With ulcers, nodules, and at times, acute mad-  
ness.

\* For other aphorisms, see CALIFORNIA AND WESTERN MEDICINE, March, 1940, page 125; April, 1940, page 179; May, 1940, page 231; July, 1940, page 35.